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FACSIMILE COVER SHEET

TO: Examiner Tongoc Tran – United States Patent and Trademark Office: Art Unit 2134

CLIENT NAME/NUMBER: 51211

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TELEPHONE: 571-272-3061   **FAX NO:** 571-273-8300

FROM: Cian G. O'Brien   **DATE:** March 17, 2006

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COMMENTS/INSTRUCTIONS:

Please see attached Appeal Brief in reply to the Examiner's Office Action of December 20, 2005 for U.S. Patent Application Serial No. 09/761,173.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

In re Patent Application of:)
DELLMO, ET AL.)
)
Serial No. 09/761,173) Examiner: **T. TRAN**
)
)
Filing Date: **JANUARY 16, 2001**) Art Unit: 2134
)
For: **SECURE WIRELESS LAN DEVICE**) Attorney Docket No. **51211**
   INCLUDING TAMPER RESISTANT)
   FEATURE AND ASSOCIATED METHODS)
_____)

APPELLANT'S APPEAL BRIEF

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Commissioner is hereby authorized to charge the Appeal Brief filing fee in the amount of $500.00 to Deposit Account No. 08-0870. The Commissioner is authorized to charge or credit any discrepancies in fee amounts to Deposit Account No. 08-0870.

(1) Real Party in Interest
The real party in interest is Harris Corporation, assignee of the present application as recorded at Reel 011660, Frame 0096.

(2) Related Appeals and Interferences
At present there are no related appeals or interferences.

(3) Status of the Claims
Claims 1-51 are pending in the application. Claims 1-51 are rejected and are being appealed herein.

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(4) Status of the Amendments
          At present there are no related appeals or
interferences.

(5) Summary of the Claimed Subject Matter
          With reference to FIGS. 1-7 (FIGS. 1 and 7
reproduced below) and the associated description at page 7,
line 3 through page 15, line 32, of the present application,
for example, the invention is intended to provide a secure
wireless LAN device **20** that provides greater security, and yet
without a significant increase in cost and/or complexity. The
device **20** includes a housing **21**, which carries a connector **27**
at one end and a pair of antennas **22** at the opposite end. The
interface connector **27** may be a PCMCIA connector or other
similar connector that can readily interface to a number of
possible LAN devices, such a corresponding PC-card slot in the
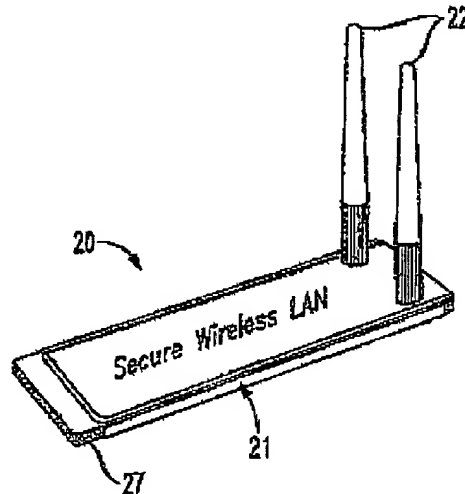side of a laptop computer **25**, for example.

FIG. 1 of the present application

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FIG. 7 of the present application

Independent Claim 1 is directed to a secure wireless local area network (LAN) device **20** including a housing **21**, and a wireless transceiver **50**, media access controller (MAC) **60** and cryptography circuit **70** each carried by the housing, the cryptography circuit connected to the MAC and the wireless transceiver. The cryptography circuit **70** operates using cryptography information and renders unusable the cryptography information based upon tampering.

Independent Claim 13 is directed to a secure wireless local area network (LAN) device **20** including a housing **21**, and a wireless transceiver **50**, cryptography circuit **70**, and at least one connector **27** each carried by the housing, the at least one connector for connecting a LAN station **25** and/or a LAN access point **30**. The cryptography

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circuit 70 is connected to the wireless transceiver 50, operates using cryptography information and renders unusable the cryptography information based upon tampering.

Independent Claim 24 is directed to a secure wireless local area network (LAN) device 20 comprising a housing 21, and a wireless transceiver 50, media access controller (MAC) 60, and cryptography circuit 70 each carried by the housing, the cryptography circuit connected to the MAC and the wireless transceiver. The cryptography circuit 70 comprising at least one volatile memory 107 for storing the cryptography information, and a battery 109 for maintaining the cryptography information in the at least one volatile memory.

Independent Claim 30 is directed to a secure wireless local area network (LAN) device 20 including a housing 21, and a wireless transceiver 50, at least one connector 27, and a cryptography circuit 70 each carried by the housing, the at least one connector for connecting to a LAN station 25 and/or a LAN access point 30. The cryptography circuit 70 comprises at least one volatile memory 107 for storing the cryptography information, and a battery 109 for maintaining the cryptography information in the at least one volatile memory.

Independent Claim 36 is directed to a secure wireless local area network (LAN) system 45 including a plurality of LAN devices 25 and a respective secure wireless LAN device 20 connected to each LAN device. Each secure wireless LAN device 20 includes a housing 21, with a wireless transceiver 50 and cryptography circuit 70 each carried by the housing, the cryptography circuit connected to the wireless transceiver. The cryptography circuit 70 operates using cryptography information and renders unusable the cryptography information based upon tampering.

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     Independent Claim 46 is directed to a method for
making tamper resistant a secure wireless local area network
(LAN) device **20** comprising a housing **21**, a wireless
transceiver **50** carried by the housing and a cryptography
circuit **70** carried by the housing. The method comprises
storing cryptography information in the cryptography circuit
70 and rendering unusable the cryptography information based
upon tampering with the secure wireless LAN device **20**.

     For the reasons set forth in the arguments below,
the independent Claims 1, 13, 24, 30, 36 and 46 and their
respective dependent claims stand separately as groups defined
as follows: Claims 1-12 stand as a group, Claims 13-23 stand
as a group, Claims 24-29 stand as a group, Claims 30-35 stand
as a group, Claims 36-45 stand as a group and Claims 46-51
stand as a group.

(6) Grounds of Rejection to be Reviewed On Appeal

     Claims 1-6, 8, 10, 13-18, 21, 24-28, 30-34, 36-41
and 43-50 stand rejected under 35 U.S.C. §103(a) as being
unpatentable over Treadway et al. (U.S. Patent No. 6,480,477)
in view of Schneck et al. (U.S. Patent Publication No.
2001/0021926) and Bambridge et al. (U.S. Patent No.
6,259,933).

     Claims 7, 9, 19-20, 29, 35, 42 and 51 stand rejected
under 35 U.S.C. §103(a) as being unpatentable over Treadway et
al. in view of Schneck et al. and Bambridge et al., and
further in view of Baldwin et al. (U.S. Patent No. 6,560,448).

     Claims 11 and 22 stand rejected under 35 U.S.C.
§103(a) as being unpatentable over Treadway et al. in view of
Schneck et al. and Bambridge et al., and further in view of
Soliman (U.S. Patent Publication No. 2002/0114288).

     Claims 12 and 23 stand rejected under 35 U.S.C.
§103(a) as being unpatentable over Treadway et al. in view of

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Schneck et al. and Bambridge et al., and further in view of
Treadway et al. '285 (U.S. Patent No. 6,665,285).

_(7)_ _Argument_

A.   Independent Claim 1 And Its Dependent Claims Are
Patentable

      The Examiner rejected independent Claim 1 as being
unpatentable over Treadway et al. in view of Schneck et al.
and Bambridge et al. The Treadway et al. patent discloses
wireless terminals **100, 100'** communicating over a wireless
link **102** carrying mega-bits-per-second data packets. (Column
5, lines 65-67; Column 6, lines 29-31; See FIG. 1 reproduced
below). The terminal **100** includes an outdoor unit (ODU) **104**
housing a MAC **222'** including an encryption/decryption block
612 between a rate control logic **250'** and rate buffer **252'**
(See **FIG. 16** reproduced below).

      As recited above, independent Claim 1 is directed to
a secure wireless local area network (LAN) device **20** including
a housing **21,** and a wireless transceiver **50,** media access
controller (MAC) **60** and cryptography circuit **70** each carried
by the housing, the cryptography circuit **70** connected to the
MAC **60** and the wireless transceiver **50.** The cryptography
circuit **70** operates using cryptography information and renders
unusable the cryptography information based upon tampering.

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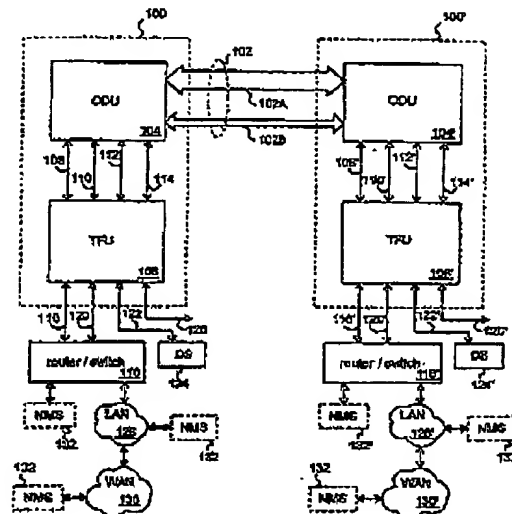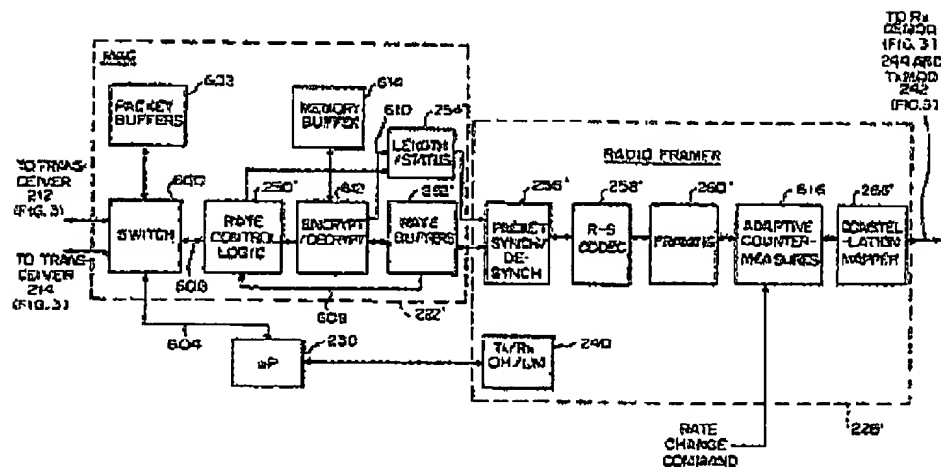Filing Date: **JANUARY 16, 2001**

FIG. 1 of Treadway et al.

FIG. 16 of Treadway et al.

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     The rate control logic **250** of the Treadway et al.
patent measures the length of each data packet to be
transmitted over the link **102**, and stores the data packet
length and status (too short, too long, misaligned) in a
length/status buffer **254**. (Column 11 lines 51-55; Column 12,
lines 9-14). For encryption, the encryption/decryption block
612 encrypts data packets prior to storing them in the rate
buffers **252'** and decrypts data packets received from the link
102 (Column 23, lines 50-55). To ensure a constant rate of
transmission over the link **102**, upon the rate buffer **252'**
filling with data packets causing a slow transmission rate
over the link **102**, the rate control logic **250'** sends a pause
packet to a switch **600** so to queue incoming data packets in
packet buffers **602'** for a predetermined time. (Column 23,
lines 34-41). The encryption/decryption block **612** uses a
control signal line **610** to instruct the length/status buffer
254' to provide an encryption tag, or encryption key for the
data packet, to the packet synch/de-synch block **256'** resulting
in an encryption tag field **702** in the reformed data packet **700**
(Column 23, lines 59-67; Column 24, lines 8-10).
     The Examiner correctly acknowledges that the
Treadway et al. patent does not disclose a MAC carried by a
housing, and cites to the Bambridge et al. patent to provide
such. The Examiner further correctly acknowledges that the
Treadway et al. patent does not disclose a cryptography
circuit connected to a MAC and wireless transceiver, where the
cryptography circuit operates using cryptography information
rendered unusable based upon tampering. The Examiner looks to
the Schneck et al. patent to provide this noted deficiency.
     The Schneck et al. patent discloses a distributor
102 having an authoring mechanism **112** for encrypting data **106**
into packaged data **108** having an encrypted body part **120** and
encrypted rules **124** for accessing the data (Paragraph 87, 94).

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Upon payment **110** to the distributor **102**, the encrypted data
108 and rules **124** are distributed to the user **104**   (Paragraph
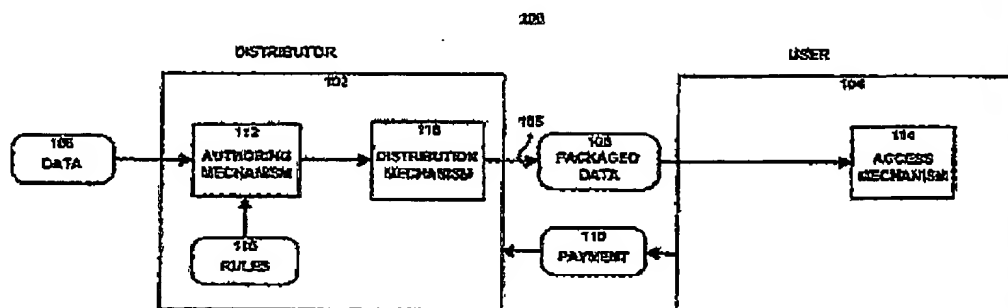126; See FIG. 1 reproduced below).

FIG. 1 of Schneck et al.

The user **104** has an access mechanism **114** confined
within a security boundary **167** containing <u>required</u> components
for tamper detection for the destruction of all internal data
(Paragraph 132, 134; See FIG. 8). Protected data is secured
through tamper detection employing physical confinement within
an access mechanism **114**, such as a sealed-unit laptop
computer. (Paragraph 62, 134-135). The access mechanism **114**
decrypts the encrypted rules **124** and grants the user access to
the protected data (Paragraph 129, 163, 168, 170). The
packaged data **108** includes computer software, text, graphics,
audio, and video, alone or in combination (Paragraph 52). The
access mechanism **114** may alternatively be used as a co-
processor for plugging into the main board of a computer **170**,
the computer passing control to the access mechanism for
accessing controlled data. (Paragraph 136; See FIG. 9
reproduced below).

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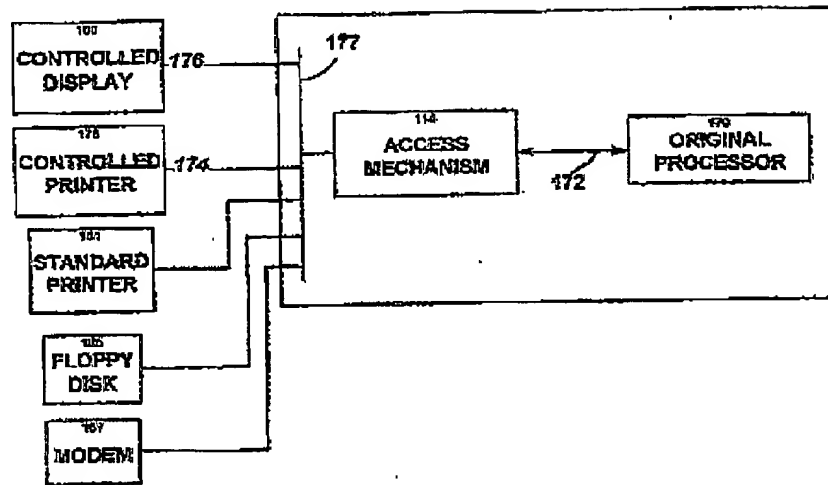Filing Date: **JANUARY 16, 2001**

FIG. 9 of Schneck et al.

        In the Final Official Action, the Examiner contends
that it would have been obvious to one of ordinary skill in
the art at the time of the present invention to incorporate
the co-processor (ie. access mechanism **114**) tamper detection
feature for destroying cryptographic information of the
Schneck et al. patent with the Treadway et al. cryptographic
apparatus to protect the cryptographic information from
tampering. It is respectfully suggested that one of ordinary
skill in the art at the time of the present invention would
have been taught away from making the suggested combination.
More specifically, the encryption/decryption block **612** of the
Treadway et al. patent teaches dual encryption and decryption
of Ethernet data packets to and from the wireless data link
102. However, as the authoring mechanism **112** of Schneck et
al. encrypts the data **106** into the encrypted packaged data
108, and thus the access mechanism **114** decrypts pre-encrypted
packaged data **108**, the access mechanism **114** teaches away from
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mutual encryption/decryption of data packets, as required by
the Treadway et al. patent. Although the access mechanism 114
includes private keys, such keys are solely used for
decryption, as asserted by the Examiner on pages 2-3 of the
Final Official Action. Thus, one of skill in the art would be
taught away from combining the teachings of the access
mechanism 114 (co-processor) tampering device with the
Treadway et al. encryption/decryption block 612, as such
teaching suggests removing the encryption of data packets
while still maintaining their decryption.

More specifically, the Treadway et al. patent
teaches storing encrypted data packets within a memory buffer
614, rate buffers 252', and packet synch 256', as well as
encryption keys within the length/status buffer 254'. The
Treadway et al. patent includes no teaching or suggestion to
destroy such information, as suggested by the access mechanism
114 tampering device of the Schneck et al. patent (Paragraph
134). Due to the steady stream of data packets incoming to
the MAC 222', even destroying the information in these buffers
would nevertheless result in reformed data packets 700 without
the encryption tag field 702 supplied by the length/status
buffer 254' to be outputted over the wireless data link 102.
Contrary to the Schneck et al. teaching of confining all data
within the access mechanism 114 tampering device for deletion
of all internal data upon tampering, the steady stream of data
packets of the Treadway et al. patent cannot be so confined
and deleted. Appellants submit that such a combination would
destroy the operability of the Treadway et al. patent, and
yield a result contrary to the teaching of the Schneck et al.
patent access mechanism 114 tampering device.

Further, the Treadway et al. patent includes no
teaching or suggestion to combine the memory buffer 614, rate
buffers 252', packet synch 256', and length/status buffer 254'

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within an enclosure with a processing unit, tamper detect
mechanism, and the other "required" components of the access
mechanism **114** illustrated in FIG. 8. In fact, the Treadway et
al. specifically teaches that the packet synch **256'** and the
other components are within separate MAC **222'** and radio framer
228' units, thus teaching away such a combination. Since the
Treadway et al. patent includes a continuous data flow system
for signalling various components to ensure a continuous data
flow rate across the wireless link **102**, one of ordinary skill
in the art would be discouraged from combining the data
packets or components within a closed, confined housing as
suggested by the access mechanism **114** of the Schneck et al.
patent.

          As previously discussed, the Schneck et al. patent
teaches an access mechanism **114** (co-processor) tampering
mechanism <u>protecting data via physical confinement within a</u>
<u>sealed-unit laptop computer</u>. Appellants submit that such
teaching is completely contrary to the Treadway et al.
Ethernet data packet transmission between terminals
(frequently among laptop computers). Thus, one of ordinary
skill in the art at the time of the present invention would be
discouraged from combining the access mechanism **114** (co-
processor) with the encryption apparatus of the Treadway et
al. patent, requiring the encryption of Ethernet data packets
be transmitted between network terminals.

          Additionally, Appellants further submit that there
is no motivation or teaching to combine the references as
suggested by the Examiner. As described above, the Treadway
et al. patent relates to the encryption/decryption of Ethernet
data packets transmitted at a megabit-per-second rate over a
wireless LAN link and includes no suggestion or motivation to
combine with a tampering detection mechanism for packaged data
sold to a user and secured within the physical bounds of an

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access laptop computer.

The Treadway et al. patent further includes no suggestion or motivation to combine with a co-processor <u>requiring connection to a computer **170**</u>, particularly as the encryption/decryption block **612** does not disclose such a computer connection. Appellants further re-emphasizes that the Treadway et al. patent requires an encryption/decryption process for signalling the length/status buffer **254'** containing length/status information of each data packet. Indeed, there is no suggestion or motivation to combine the co-processor of the Schneck et al. patent in such an encryption/decryption process, particularly as the co-processor does not process Ethernet data packets, and thus cannot generate a required signal to a length/status buffer **254'** containing length/status information of Ethernet data packets.

Consequently, Appellants respectfully submit that there is no proper motivation to selectively combine the three cited references. The Appellants respectfully submit that the Examiner is using impermissible hindsight, gleaned from the Appellants' own specification, as a motivation to selectively combine disjointed pieces of the prior art in an attempt to produce the claimed invention.

As the Examiner is aware, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim features. The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the Appellants have done. To support the conclusion that the

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claimed invention is directed to obvious subject matter,
either the reference must expressly or impliedly suggest the
claimed invention or the Examiner must present a convincing
line of reasoning as to why the artisan would have found the
claimed invention to have been obvious in light of the
teachings of the reference. Both the suggestion to make the
claimed combination and the reasonable expectation of success
must be founded in the prior art and not in Appellants'
disclosure.

There is simply no teaching or suggestion in the
cited references to provide the combination of features as
claimed. Accordingly, for at least the reasons given above,
Appellants maintain that the cited references do not disclose
or fairly suggest the invention as set forth in independent
Claim 1. Furthermore, no proper modification of the teachings
of these references could result in the invention as claimed.
Thus, the rejection under 35 U.S.C. §103(a) should be
withdrawn or reversed.

Accordingly, independent Claim 1 is patentable, and
the dependent claims, which recite yet further distinguishing
features of the invention, are also patentable, and require no
further discussion.

B. Independent Claim 13 And Its Dependent Claims Are Patentable

The Examiner rejected independent Claim 13 as being
unpatentable over Treadway et al. in view of Schneck et al.
and Bambridge et al. The Treadway et al., Schneck et al. and
Bambridge et al. patents are discussed above.

As recited above, independent Claim 13 is directed
to a secure wireless local area network (LAN) device 20
including a housing 21, and a wireless transceiver 50,
cryptography circuit 70, and at least one connector 27 each

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carried by the housing, the at least one connector for
connecting to at least one of a LAN station 25 and a LAN
access point 30. The cryptography circuit 70 is connected to
the wireless transceiver 50, and operates using cryptography
information and renders unusable the cryptography information
based upon tampering.

On Pages 5-6 of the Final Official Action, the
Examiner asserts that independent Claim 13 includes
recitations "substantially similar" to independent Claim 1 and
rejects independent Claim 13 based on the similar rationale.

Appellants submit that the claim recitation of at
least one connector 27 each carried by the housing for
connecting to at least one of a LAN station 25 and a LAN
access point 30 is a claim recitation that cannot be simply
ignored by the Examiner. In rejecting dependent Claim 8
including the same recitation, the Examiner cites to column 3,
lines 35-50 and column 27, lines 28-40 of the Treadway et al.
patent. However, these portions of the Treadway et al. patent
merely discuss radio super frames 380 communicating with nodes
of a metropolitan area network, and fail to disclose a
connector 27 carried by the housing for connecting to at least
one of a LAN station 25 and a LAN access point 30. Thus, even
if the suggested combination of the Treadway et al. and the
Schneck et al. patents was obvious, it would nevertheless fail
to produce the claimed invention.

As argued above with respect to independent Claim 1,
Appellants respectfully contend that one of ordinary skill in
the art at the time of the present invention would be taught
away from incorporating the teaching of the co-processor
tampering mechanism of the Schneck et al. patent with the
encryption/decryption block 612 of the Treadway et al. patent,
as suggested by the Examiner. As further discussed above with
regard to independent Claim 1, there is no suggestion or

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teaching in the Treadway et al. patent to combine the co-
processor tampering mechanism of the Schneck et al. patent
with the encryption/decryption block **612** of the Treadway et
al. patent, as suggested by the Examiner.

      Accordingly, independent Claim 13 is patentable, and
the dependent claims, which recite yet further distinguishing
features of the invention, are also patentable, and require no
further discussion.

C.   Independent Claim 24 And Its Dependent Claims Are Patentable

      The Examiner rejected independent Claim 24 as being
unpatentable over Treadway et al. in view of Schneck et al.
and Bambridge et al. The Treadway et al., Schneck et al. and
Bambridge et al. patents are discussed above.

      As recited above, independent Claim 24 is directed
to a secure wireless local area network (LAN) device **20**
comprising a housing **21**, and a wireless transceiver **50**, media
access controller (MAC) **60**, and cryptography circuit **70** each
carried by the housing, the cryptography circuit connected to
the MAC and the wireless transceiver. The cryptography
circuit **70** comprising at least one volatile memory **107** for
storing the cryptography information, and a battery **109** for
maintaining the cryptography information in the at least one
volatile memory.

      On Page 6 of the Final Official Action, the Examiner
asserts that independent Claim 24 includes recitations
"substantially similar" to independent Claim 1 and rejects
independent Claim 24 based on the similar rationale.

      Appellants submit that the claim recitation of at
least one volatile memory **107** for storing the cryptography
information, and a battery **109** for maintaining the
cryptography information in the at least one volatile memory

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is a claim recitation that cannot be simply ignored by the Examiner. In rejecting dependent Claim 2 including the same recitation, the Examiner cites to paragraph 67 of the Schneck et al. patent to provide such. However, this portion of the Schneck et al. patent discloses a long-life battery for **rewriting** over the private key for decrypting protected data in a nonvolatile memory, thus teaching away a battery for **maintaining** cryptographic information in a volatile memory, as recited in independent Claim 24. Thus, even if the suggested combination of the Treadway et al. and the Schneck et al. patents was obvious, it would nevertheless fail to produce the claimed invention.

As argued above with respect to independent Claim 1, Appellants respectfully contend that one of ordinary skill in the art at the time of the present invention would be taught away from incorporating the teaching of the co-processor tampering mechanism of the Schneck et al. patent with the encryption/decryption block **612** of the Treadway et al. patent, as suggested by the Examiner. As further discussed above with regard to independent Claim 1, there is no suggestion or teaching in the Treadway et al. patent to combine the co-processor tampering mechanism of the Schneck et al. patent with the encryption/decryption block **612** of the Treadway et al. patent, as suggested by the Examiner.

Accordingly, independent Claim 24 is patentable, and the dependent claims, which recite yet further distinguishing features of the invention, are also patentable, and require no further discussion.

D. Independent Claim 30 And Its Dependant Claims Are Patentable

The Examiner rejected independent Claim 30 as being unpatentable over Treadway et al. in view of Schneck et al.

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and Bambridge et al.   The Treadway et al., Schneck et al. and
Bambridge et al. patents are discussed above.

As recited above, independent Claim 30 is directed
to a secure wireless local area network (LAN) device **20**
including a housing **21**, and a wireless transceiver **50**, at
least one connector **27**, and a cryptography circuit **70** each
carried by the housing, the at least one connector **27** for
connecting to at least one of a LAN station **25** and a LAN
access point **30**. The cryptography circuit **70** comprises at
least one volatile memory **107** for storing the cryptography
information, and a battery **109** for maintaining the
cryptography information in the at least one volatile memory.

On Page 6 of the Final Official Action, the Examiner
asserts that independent Claim 30 includes recitations
"substantially similar" to independent Claim 1 and rejects
independent Claim 30 based on the similar rationale.

Appellants submit that the claim recitations of at
least one connector **27** each carried by the housing for
connecting to at least one of a LAN station **25** and a LAN
access point **30** is a claim recitation that cannot be simply
ignored by the Examiner. In rejecting dependent Claim 8
including the same recitation, the Examiner cites to column 3,
lines 35-50 and column 27, lines 28-40 of the Treadway et al.
patent. However, these portions of the Treadway et al. patent
merely discuss radio super frames **380** communicating with nodes
of a metropolitan area network, and fail to disclose a
connector **27** carried by the housing for connecting to at least
one of a LAN station **25** and a LAN access point **30**. Thus, even
if the suggested combination of the Treadway et al. and the
Schneck et al. patents was obvious, it would nevertheless fail
to produce the claimed invention.

Appellants submit that the claim recitation of at
least one volatile memory **107** for storing the cryptography

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information, and a battery **109** for maintaining the
cryptography information in the at least one volatile memory
is a claim recitation that cannot be simply ignored by the
Examiner. In rejecting dependent Claim 2 including the same
recitation, the Examiner cites to paragraph 67 of the Schneck
et al. patent to provide such. However, this portion of the
Schneck et al. patent discloses a long-life battery for
rewriting over the private key for decrypting protected data
in a nonvolatile memory, thus teaching away a battery for
maintaining cryptographic information in a volatile memory, as
recited in independent Claim 30. Thus, even if the suggested
combination of the Treadway et al. and the Schneck et al.
patents was obvious, it would nevertheless fail to produce the
claimed invention.

As argued above with respect to independent Claim 1,
Appellants respectfully contend that one of ordinary skill in
the art at the time of the present invention would be taught
away from incorporating the teaching of the co-processor
tampering mechanism of the Schneck et al. patent with the
encryption/decryption block **612** of the Treadway et al. patent,
as suggested by the Examiner. As further discussed above with
regard to independent Claim 1, there is no suggestion or
teaching in the Treadway et al. patent to combine the co-
processor tampering mechanism of the Schneck et al. patent
with the encryption/decryption block **612** of the Treadway et
al. patent, as suggested by the Examiner.

Accordingly, independent Claim 30 is patentable, and
the dependent claims, which recite yet further distinguishing
features of the invention, are also patentable, and require no
further discussion.

E.   Independent Claim 36 And Its Dependant Claims Are
Patentable

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   The Examiner rejected independent Claim 36 as being
unpatentable over Treadway et al. in view of Schneck et al.
and Bambridge et al. The Treadway et al., Schneck et al. and
Bambridge et al. patents are discussed above.

   As recited above, independent Claim 36 is directed
to a secure wireless local area network (LAN) system **45**
including a plurality of LAN devices **25**, a respective secure
wireless LAN device **20** connected to each of said plurality of
LAN devices, each secure wireless LAN device including a
housing **21**, with a wireless transceiver **50** and cryptography
circuit **70** each carried by the housing, the cryptography
circuit **70** connected to the wireless transceiver **50**. The
cryptography circuit **70** operates using cryptography
information and renders unusable the cryptography information
based upon tampering.

   On Page 6 of the Final Official Action, the Examiner
asserts that independent Claim 36 includes recitations
"substantially similar" to independent Claim 1 and rejects
independent Claim 36 based on the similar rationale.

   As argued above with respect to independent Claim 1,
Appellants respectfully contend that one of ordinary skill in
the art at the time of the present invention would be taught
away from incorporating the teaching of the co-processor
tampering mechanism of the Schneck et al. patent with the
encryption/decryption block **612** of the Treadway et al. patent,
as suggested by the Examiner. As further discussed above with
regard to independent Claim 1, there is no suggestion or
teaching in the Treadway et al. patent to combine the co-
processor tampering mechanism of the Schneck et al. patent
with the encryption/decryption block **612** of the Treadway et
al. patent, as suggested by the Examiner.

   Accordingly, independent Claim 36 is patentable, and
the dependent claims, which recite yet further distinguishing

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features of the invention, are also patentable, and require no
further discussion.

F.   Independent Claim 46 And Its Dependant Claims Are Patentable

The Examiner rejected independent Claim 46 as being
unpatentable over Treadway et al. in view of Schneck et al.
and Bambridge et al. The Treadway et al., Schneck et al. and
Bambridge et al. patents are discussed above.

As recited above, independent Claim 46 is directed
to a method for making tamper resistant a secure wireless
local area network (LAN) device 20 comprising a housing 21, a
wireless transceiver 50 carried by the housing and a
cryptography circuit 70 carried by the housing, the method
comprising storing cryptography information in the
cryptography circuit 70 and rendering unusable the
cryptography information based upon tampering with the secure
wireless LAN device.

On Page 6 of the Final Official Action, the Examiner
asserts that independent Claim 46 includes recitations
"substantially similar" to independent Claim 1 and rejects
independent Claim 46 based on the similar rationale.

As argued above with respect to independent Claim 1,
Appellants respectfully contend that one of ordinary skill in
the art at the time of the present invention would be taught
away from incorporating the teaching of the co-processor
tampering mechanism of the Schneck et al. patent with the
encryption/decryption block 612 of the Treadway et al. patent,
as suggested by the Examiner. As further discussed above with
regard to independent Claim 1, there is no suggestion or
teaching in the Treadway et al. patent to combine the co-
processor tampering mechanism of the Schneck et al. patent
with the encryption/decryption block 612 of the Treadway et

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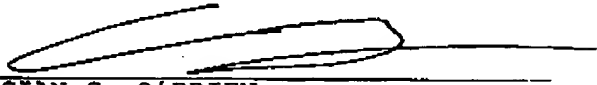Serial No: 09/761,173
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al. patent, as suggested by the Examiner.

Accordingly, independent Claim 46 is patentable, and the dependent claims, which recite yet further distinguishing features of the invention, are also patentable, and require no further discussion.

CONCLUSIONS

In view of the foregoing arguments, it is submitted that all of the claims are patentable over the prior art. Accordingly, the Board of Patent Appeals and Interferences is respectfully requested to reverse the earlier unfavorable decision by the Examiner.
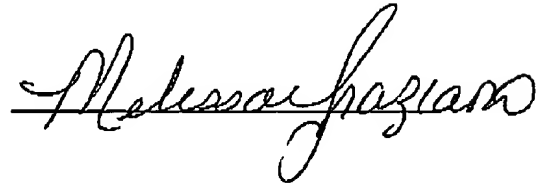
Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

     I hereby certify that this correspondence is being forwarded via facsimile no. 571-273-8300 to MS Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this /17th day of March, 2006.

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<u>**APPENDIX A - CLAIMS ON APPEAL**</u>
<u>**FOR U.S. PATENT APPLICATION SERIAL NO. 09/761,173**</u>

1.   A secure wireless local area network (LAN) device comprising:

a housing;

a wireless transceiver carried by said housing;

a media access controller (MAC) carried by said housing; and

a cryptography circuit carried by said housing and connected to said MAC and said wireless transceiver, said cryptography circuit operating using cryptography information and rendering unuseable the cryptography information based upon tampering.

2.   A secure wireless LAN device according to Claim 1 wherein said cryptography circuit comprises:

at least one volatile memory for storing the cryptography information; and

a battery for maintaining the cryptography information in said at least one volatile memory.

3.   A secure wireless LAN device according to Claim 2 wherein said cryptography circuit further comprises at least one switch operatively connected to said housing for disconnecting said battery from said at least one volatile memory so that the cryptography information therein is lost based upon breach of said housing.

4.   A secure wireless LAN device according to Claim 1 wherein said cryptographic information comprises a cryptography key.

5.   A secure wireless LAN device according to Claim

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1 wherein said security information comprises at least a
portion of a cryptography algorithm.

        6.   A secure wireless LAN device according to Claim
1 wherein said MAC implements a predetermined wireless LAN MAC
protocol.

        7.   A secure wireless LAN device according to Claim
6 wherein said predetermined wireless LAN MAC protocol is
based upon the IEEE 802.11 standard.

        8.   A secure wireless LAN device according to Claim
1 further comprising at least one connector carried by said
housing for connecting to at least one of a user station and
an access point.

        9.   A secure wireless LAN device according to Claim
8 wherein said at least one connector comprises a PCMCIA
connector.

        10.   A secure wireless LAN device according to Claim
1 wherein said cryptography circuit comprises:
        a cryptography processor; and
        a control and gateway circuit connecting said
cryptography processor to said MAC and said wireless
transceiver.

        11.   A secure wireless LAN device according to Claim
1 wherein said wireless transceiver comprises:
        a baseband processor;
        a modem connected to said baseband processor; and
        a radio frequency transmitter and receiver connected
to said modem.

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      12. A secure wireless LAN device according to Claim 1 further comprising at least one antenna carried by said housing and connected to said wireless transceiver.

      13. A secure wireless local area network (LAN) device comprising:
      a housing;
      a wireless transceiver carried by said housing;
      at least one connector carried by said housing for connecting to at least one of a LAN station and a LAN access point; and
      a cryptography circuit carried by said housing and connected to said wireless transceiver, said cryptography circuit operating using cryptography information and rendering unuseable the cryptography information based upon tampering.

      14. A secure wireless LAN device according to Claim 13 wherein said cryptography circuit comprises:
      at least one volatile memory for storing the cryptography information; and
      a battery for maintaining the cryptography information in said at least one volatile memory.

      15. A secure wireless LAN device according to Claim 14 wherein said cryptography circuit further comprises at least one switch operatively connected to said housing for disconnecting said battery from said at least one volatile memory so that the cryptography information therein is lost based upon breach of said housing.

      16. A secure wireless LAN device according to Claim 13 wherein said cryptographic information comprises a cryptography key.

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17. A secure wireless LAN device according to Claim
13 wherein said security information comprises at least a
portion of a cryptography algorithm.

18. A secure wireless LAN device according to Claim
13 further comprising a media access controller (MAC) carried
by said housing; and wherein said MAC implements a
predetermined wireless LAN MAC protocol.

19. A secure wireless LAN device according to Claim
18 wherein said predetermined wireless LAN MAC protocol is
based upon the IEEE 802.11 standard.

20. A secure wireless LAN device according to Claim
13 wherein said at least one connector comprises a PCMCIA
connector.

21. A secure wireless LAN device according to Claim
13 wherein said cryptography circuit comprises:
        a cryptography processor; and
        a control and gateway circuit connecting said
cryptography processor to said MAC and said wireless
transceiver.

22. A secure wireless LAN device according to Claim
13 wherein said wireless transceiver comprises:
        a baseband processor;
        a modem connected to said baseband processor; and
        a radio frequency transmitter and receiver connected
to said modem.

23. A secure wireless LAN device according to Claim
13 further comprising at least one antenna carried by said
housing and connected to said wireless transceiver.

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24.   A secure wireless local area network (LAN)
device comprising:
a housing;
a wireless transceiver carried by said housing;
a media access controller (MAC) carried by said
housing; and
a cryptography circuit carried by said housing and
connected to said MAC and said wireless transceiver, said
cryptography circuit comprising
at least one volatile memory for storing the
cryptography information, and
a battery for maintaining the cryptography
information in said at least one volatile memory.

25.   A secure wireless LAN device according to Claim
24 wherein said cryptography circuit further comprises at
least one switch operatively connected to said housing for
disconnecting said battery from said at least one volatile
memory so that the cryptography information therein is lost
based upon a breach of said housing.

26.   A secure wireless LAN device according to Claim
24 wherein said cryptographic information comprises a
cryptography key.

27.   A secure wireless LAN device according to Claim
24 wherein said security information comprises at least a
portion of a cryptography algorithm.

28.   A secure wireless LAN device according to Claim
24 wherein said MAC implements a predetermined wireless LAN
MAC protocol.

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29.   A secure wireless LAN device according to Claim
28 wherein said predetermined wireless LAN MAC protocol is
based upon the IEEE 802.11 standard.

30.   A secure wireless local area network (LAN)
device comprising:
    a housing;
    a wireless transceiver carried by said housing;
    at least one connector carried by said housing for
connecting to at least one of a LAN station and a LAN access
point; and
    a cryptography circuit carried by said housing and
connected to said wireless transceiver, said cryptography
circuit comprising
    at least one volatile memory for storing the
cryptography information, and
    a battery for maintaining the cryptography
information in said at least one volatile memory.

31.   A secure wireless LAN device according to Claim
30 wherein said cryptography circuit further comprises at
least one switch operatively connected to said housing for
disconnecting said battery from said at least one volatile
memory so that the cryptography information therein is lost
based upon breach of said housing.

32.   A secure wireless LAN device according to Claim
30 wherein said cryptographic information comprises a
cryptography key.

33.   A secure wireless LAN device according to Claim
30 wherein said security information comprises at least a
portion of a cryptography algorithm.

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34. A secure wireless LAN device according to Claim
30 further comprising a media access controller (MAC) carried
by said housing; and wherein said MAC implements a
predetermined wireless LAN MAC protocol.

35. A secure wireless LAN device according to Claim
34 wherein said predetermined wireless LAN MAC protocol is
based upon the IEEE 802.11 standard.

36. A secure wireless local area network (LAN)
system comprising:
       a plurality of LAN devices;
       a respective secure wireless LAN device connected to
each of said plurality of LAN devices, each secure wireless
LAN device comprising
       a housing,
       a wireless transceiver carried by said housing, and
       a cryptography circuit carried by said housing and
connected to said wireless transceiver, said cryptography
circuit operating using cryptography information and rendering
unuseable the cryptography information based upon tampering.

37. A secure wireless LAN system according to Claim
36 wherein said cryptography circuit comprises:
       at least one volatile memory for storing the
cryptography information; and
       a battery for maintaining the cryptography
information in said at least one volatile memory.

38. A secure wireless LAN system according to Claim
37 wherein said cryptography circuit further comprises at
least one switch operatively connected to said housing for
disconnecting said battery from said at least one volatile
memory so that the cryptography information therein is lost
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based upon breach of said housing.

39.   A secure wireless LAN system according to Claim
36 wherein said cryptographic information comprises a
cryptography key.

40.   A secure wireless LAN system according to Claim
36 wherein said security information comprises at least a
portion of a cryptography algorithm.

41.   A secure wireless LAN system according to Claim
36 wherein said secure wireless LAN device comprises a media
access controller (MAC) connected to said wireless
transceiver; and wherein said MAC implements a predetermined
wireless LAN MAC protocol.

42.   A secure wireless LAN system according to Claim
41 wherein said predetermined wireless LAN MAC protocol is
based upon the IEEE 802.11 standard.

43.   A secure wireless LAN system according to Claim
36 wherein said plurality of LAN devices comprises a plurality
of user stations.

44.   A secure wireless LAN system according to Claim
36 wherein said plurality of LAN devices comprises at least
one user station and at least one access point.

45.   A secure wireless LAN system according to Claim
36 wherein said plurality of LAN devices comprises a plurality
of access points.

46.   A method for making tamper resistant a secure
wireless local area network (LAN) device comprising a housing,

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a wireless transceiver carried by the housing and a
cryptography circuit carried by the housing, the method
comprising:

    storing cryptography information in the cryptography
circuit; and

    rendering unuseable the cryptography information
based upon tampering with the secure wireless LAN device.

    47.   A method according to Claim 46 wherein the
cryptography circuit comprises at least one volatile memory
for storing the cryptography information, and a battery for
maintaining the cryptography information in the at least one
volatile memory; and wherein rendering unuseable comprises
disconnecting the battery from the at least one volatile
memory based upon a breach of the housing.

    48.   A method according to Claim 46 wherein the
cryptographic information comprises a cryptography key.

    49.   A method according to Claim 46 wherein the
security information comprises at least a portion of a
cryptography algorithm.

    50.   A method according to Claim 46 wherein the
secure wireless LAN device further comprises a media access
controller (MAC) carried by the housing; and wherein the MAC
implements a predetermined wireless LAN MAC protocol.

    51.   A method according to Claim 50 wherein the
predetermined wireless LAN MAC protocol is based upon the IEEE
802.11 standard.

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<u>**APPENDIX B - EVIDENCE APPENDIX**</u>
<u>**PURSUANT TO 37 C.F.R. § 41.37(c)(1)(ix)**</u>

None.

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APPENDIX C — RELATED PROCEEDINGS APPENDIX PURSUANT TO 37 C.F.R. § 41.37(c)(1)(x)

None.

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